REMARKS

Claims 1-30 stand rejected in the Office Action dated October 29, 2007. Applicants have amended claims 1- 4, 9, 11, 13, 14, 19, 21-23, and 29. Claim 25 has been canceled. No claims have been added. Therefore, following the present response, claims 1-24 and 26-30 will be pending in this application.

Other

Applicants propose amending claims 1, 2, 11, 14, 21, and 22 to more clearly articulate a database management *system* with code that is executed *in* the DBMS. Applicants propose further amending claims 1, 11, and 21 and also propose amending claims 9, 19, and 29 to provide sufficient antecedent basis.

Applicants submit that the amendments put the claims in better form for allowance and respectfully request entry of these proposed amendments.

Summary of Telephonic Interview

The undersigned wishes to thank the Examiner for taking the time to conduct a telephonic interview on January 16 at 3:00 pm. During the interview, the Examiner agreed to withdraw the rejection under 35 U.S.C. §112, second paragraph. The undersigned agreed to strike "(or its equivalent)" from claims 3, 13, and 23 as requested by the Examiner.

The undersigned also presented the arguments set forth below with respect to the 35 U.S.C. §103 rejections. In particular, the undersigned discussed how application code written as .NET managed code and executing such code in a database management system, as used in the present application, is distinguishable from the application code and method of execution of application code that is set forth in the cited references. Applicants propose to make additional amendments, which are enclosed herein. While no agreement was reached, the Examiner indicated that he would further consider the points raised.

Rejection under 35 U.S.C. §101

Claims 1-30 were rejected under 35 U.S.C. §101 for allegedly not being directed to statutory subject matter. The Office Action asserts that independent claims 1, 11, and 21 deal

with simple abstract ideas and that claims that recite a computer that solely calculates a mathematical formula or a computer disk that solely stores a mathematical formula are not directed to the type of statutory subject matter eligible for patent protection. Furthermore, the Office Action asserts that claims 1-30 do not produce useful, concrete, and tangible results.

Applicants respectfully disagree that independent claims 1, 11, and 21 are not directed to statutory subject matter. The claims are directed to executing application code in a database management system (DBMS) (as amended). A database management system is a complex set of programs that controls the organization, storage, management and retrieval of data in a database. Transmitting application code from an application, such as a client server, to a DBMS, such as a database server, is a useful, tangible, and concrete result as explained in the Application. Furthermore, the ability to execute application code that is written in a .NET language in a DBMS provides an efficient approach in database management. Thus, the claims do not result in simple a mathematical formula or the storage of such as suggested by the Office Action, but rather, are statutory subject matter as required by 35 U.S.C §101.

Furthermore, while Applicants regard the subject matter of claim 21 to be directed to statutory subject matter in its present form, without prejudice or disclaimer, Applicants have amended claim 21 to recite a computer readable *storage* medium.

Because the remaining claims in the application depend, either directly or indirectly, from independent claims 1, 11, and 21, it is requested that the rejection, under 35 U.S.C. § 101, of claims 1-30 be reconsidered and withdrawn.

Rejection under 35 U.S.C. §103

Claims 1-30 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. ("Pastor") in view of U.S. Publication No. 2002/0059204A1 ("Harris"). To establish a *prima facie* case of obviousness for a rejection under 35 U.S.C. §103(a), the prior art references when combined must teach or suggest *all* the claim limitations. Based on the foregoing amendments and the following remarks, Applicants submit that a *prima facie* case of obviousness is not met for independent claims 1, 11, and 21, and therefore request reconsideration and withdrawal of the rejection under 35 U.S.C. §103(a).

The rejection with respect to claims 1-30 are discussed first, collectively, followed by a discussion regarding amendments made for each independent claim.

Claims 1-30

Independent claims 1 and 11 are directed to a method for executing application code in a database management system (DBMS). Claim 1 and 11 recite "enabling said DBMS to execute .NET managed code" and "writing said application code as .NET managed code." Claim 25 comprises a computer readable storage medium comprises computer-readable instructions directed to these features. The Office Action asserts that Pastor teaches these elements. Applicants respectfully disagree.

Pastor is directed to an automated software production system that captures system requirements and, based on those requirements, produces application source code or creates a data model in a database system. Applicants respectfully submit that Pastor's application code is developed separately from the database system, and furthermore, Pastor does not teach .NET managed code.

In particular, the Office Action asserts that Pastor's use of a translator that produces the application source code in a language, such as C++, Visual Basic, or JAVA, teaches "enabling said DBMS to execute .NET managed code" and "writing said application code as .NET managed code." However, nowhere does Pastor teach that the application code, such as JAVA or Visual Basic, is written as .NET managed code. The Office Action further cites Pastor's use of a database generator to produce instructions in a scripting language, *e.g.*, SQL, as teaching .NET managed code (Pastor, col. 7, lines 58-59). However, SQL is also not .NET managed code and nowhere does Pastor teach that the scripting language, such as SQL, is written as .NET managed code. As set forth in Applicants' specification, .NET managed code is application code, such as Visual Basic, that is compiled into intermediate language code that can be managed or executed by an execution platform, *e.g.*, by the Common Language Runtime (CLR) (Specification, [0014], [0015]). Thus, because Pastor does not teach .NET managed code, it does not teach a method that includes "writing said application code as .NET managed code." And, because Pastor does not teach any .NET managed code, Pastor does not teach "enabling said DBMS to execute .NET managed code."

Furthermore, even if the application code produced in Pastor was .NET managed code, the application code is generated separately from the database schema (Pastor, FIG. 2). Pastor does not teach anything about enabling Pastor's database schema or a database management system of any kind to execute application code. Thus, Pastor neither discloses nor suggests "enabling said DBMS to execute .NET managed code" as recited in claim 1.

Therefore, Applicants respectfully submit that independent claims 1, 11, and 21 patentably define over the references as applied. As claims 2-10 depend from claim 1, 12-20 depend from claim 11, and 22- 30 depend from claim 21, Applicants further respectfully submit that claims 2-10, 12-20, and 22-30 patentably define over the references as applied.

Accordingly, Applicants respectfully submit that the present claims patentably define over the cited reference and request reconsideration and withdrawal of the rejection under 35 U.S.C. §103(a).

Claims 1-10

While Applicants regard the claims to be patentable over Pastor in their present form based on the foregoing reasons, Applicants have amended claim 1 to further clarify the method of executing .NET managed application code based on an invocation context, such as that recited in dependent claim 4. In particular, claim 1 recites transmitting an invocation context from an application to the DBMS and executing the .NET managed application code in the DBMS based on the invocation context. Claim 4 was rejected by the Office Action under Pastor. Applicants submit that Pastor does not teach claim 4, nor does it teach the amended features of claim 1.

In particular, the Office Action asserts that Pastor teaches the receipt by the DBMS of an invocation context and executing code based on that invocation context, and cites the portion of Pastor that generates a function to translate service calling into invocation to system-logic services (Pastor, col. 34, lines 30-32, as referenced in the Office Action). However, the invocation of services in Pastor is used by the user-interface translator to produce *application source code* such as C++, Visual Basic or JAVA (Pastor, FIG. 2, 234, 204). The invocation is *not* used for executing .NET managed application code in a DBMS. Further, Pastor's database system is described merely as tables for storage, and there is no indication that code is executed in a DBMS. As described above, Pastor's application code is

developed separately from the database schema. Thus, Pastor does not teach transmitting an invocation context from an application *to* said DBMS and executing said *.NET managed* application code *in* the DBMS based on the invocation context.

The Office Action asserts that Pastor teaches the aforementioned claim elements and that Harris teaches the remaining elements in the claim. However, because Pastor fails to teach or suggest the foregoing features of independent claim 1, and Harris does not cure the deficiencies of Pastor, the cited references cannot render the claims obvious because all of the elements are not taught or suggested. Thus, Applicants respectfully submit that the claims patentably define over the references as applied. As claims 2-10 depend from claim 1, Applicants further respectfully submit that claims 2-10 patentably define over the references as applied.

Accordingly, Applicants respectfully submit that the present claims patentably define over the cited reference and request withdrawal of the rejection of claims 1-10 under 35 U.S.C. 103(a).

Claims 11-20

Independent claim 11 is directed to a system for executing application code in a database management system (DBMS). The Office Action asserts that Pastor teaches the features of claim 11. Applicants submit that neither Pastor nor Harris teach claim 21 at least for the foregoing reasons with respect to claim 1.

Furthermore, while Applicants regard the claims to be patentable over Pastor in their present form based on the foregoing reasons, Applicants have amended claim 11 to recite "a subsystem for writing said application code as .NET managed *code that is managed by a .NET Common Language Runtime platform.*" Support for the amendment can be found throughout Applicant's Specification. Applicants submit that the cited references do not teach application code written as .NET managed code that is managed by a .NET Common Language Runtime platform, where the .NET managed application code is transmitted to a DBMS and executed in the DBMS.

Thus, Applicants respectfully submit that the claims patentably define over the references as applied. As claims 12-20 depend from claim 11, Applicants further respectfully submit that claims 12-20 patentably define over the references as applied.

Accordingly, Applicants respectfully submit that the present claims patentably define over the cited reference and request withdrawal of the rejection of claims 11-20 under 35 U.S.C. 103(a).

Claims 21-30

Independent claim 21 is directed to a computer-readable storage medium comprising computer-readable instructions for executing application code in a database management service. Applicants submit that neither Pastor nor Harris teach claim 21 at least for the foregoing reasons with respect to claims 1 and 11.

Furthermore, while Applicants regard the claims to be patentable over Pastor in their present form based on the foregoing reasons, Applicants have incorporated the features of now canceled claim 25 into claim 21 to recite separating the .NET managed application code into an immutable part and a mutable part, and executing the code in the DBMS based on the results of the separation. The Office Action asserts that Pastor taught the features of claim 25 that are now incorporated into claim 1. Applicants respectfully disagree.

In particular, Applicants submit that none of FIG. 4, page 6, or paragraph [0062] of Pastor teach or suggest the recited claim elements, and nowhere else does Pastor teach or suggest such elements. Rather, Applicants cannot find any portion of Pastor that describes the separation of .NET managed application code into an immutable part and a mutable part. Thus, Pastor does not teach "separating said .NET managed application code into an immutable part and a mutable part" and "executing said .NET managed application code in said DBMS; executing based on the results of said separation."

Accordingly, Applicants respectfully submit that the claims as amended patentably define over the cited reference and requests withdrawal of the rejection of claims 21-30 under 35 U.S.C. 103(a).

CONCLUSION

For the foregoing reasons, Applicants respectfully submit that all of the claims of the present application patentably define over the prior art of record. Reconsideration of the Office Action and a Notice of Allowance are respectfully requested. In the event that the Examiner cannot allow the present application for any reason, the Examiner is encouraged to contact the undersigned attorney, Lori Swanson at (215) 564-8997 to discuss the resolution of any remaining issues.

Date: January 29, 2008   **/Lori Anne D. Swanson/**

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